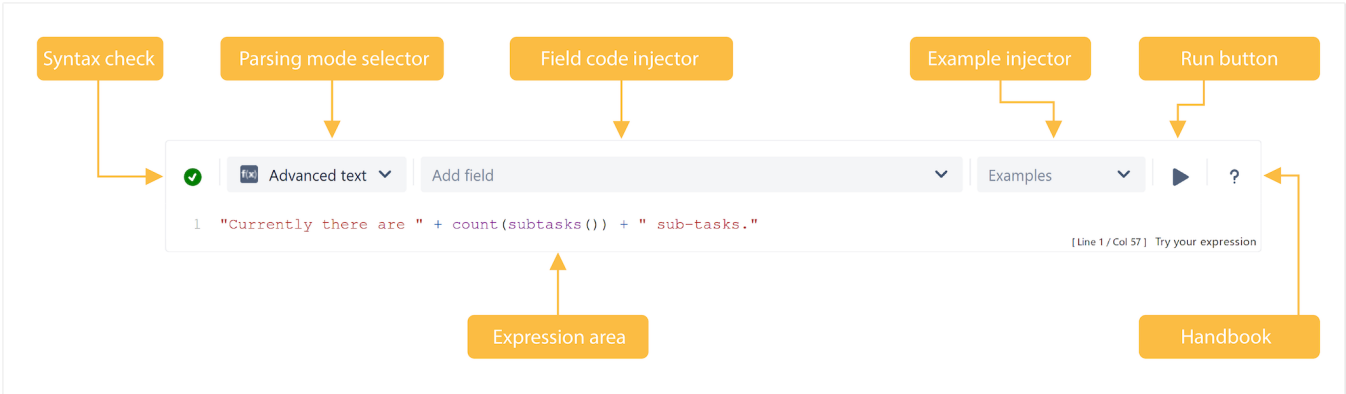


# JWT expression editor

JWT provides a huge set of functionalities to read and manipulate data from Jira issues, users, projects, and more.

The "expressions" that are being evaluated by the expression parser are composed and tested in the **JWT expression editor**.

Depending on what you are doing, you will be presented with different options and functionalities, but in the end it always comes down to **writing an expression**, which will be evaluated on runtime.



## What is an expression?

Expressions are a fundamental concept within Jira Workflow Toolbox: every input into the [JWT expression editor](#) is considered an expression and will be interpreted by the JWT expression parser against the selected [parsing mode](#). They are used in [workflow functions](#), [automation rules](#), and [calculated fields](#).

Expressions range from simple text, e.g. **Hello world!**, over mathematical calculation, e.g. **3 + 4**, to the extensive usage of [expression parser functions](#), and beyond.

[Read more](#)

## Syntax check

Your browser does not support the HTML5 video element

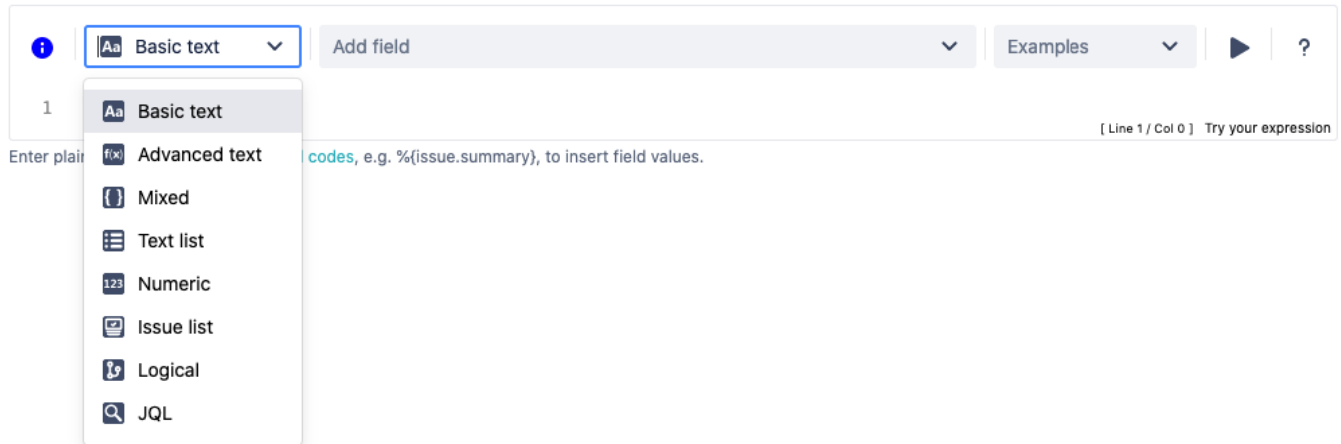
1. As you type in your expression the syntax check button is synchronized with your expression and you can see if your expression is valid or not.
2. Click on the **syntax check** button to review your expression.

| Output                                                                              | Description                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Valid expression:</b> The parser expression entered is valid.                                                                                                                                                                                                                                                  |
|  | <b>Parsing error:</b> The parser expression entered is not valid and you can do the following to fix the issue: <ul style="list-style-type: none"><li>• Check your selected <a href="#">Parsing mode</a></li><li>• Try an example configuration from the right hand side of the configuration interface</li></ul> |

## Parsing mode selector

A **parsing mode** determines **how** the JWT expression parser interprets an expression.

The **available** parsing modes depend on the **context** you are using the expression in. As an example, only the [Logical mode](#) is available if you configure a **conditional execution** in a workflow post function or that you can only use the [Numeric mode](#) if you want to set a number field using a parser expression.

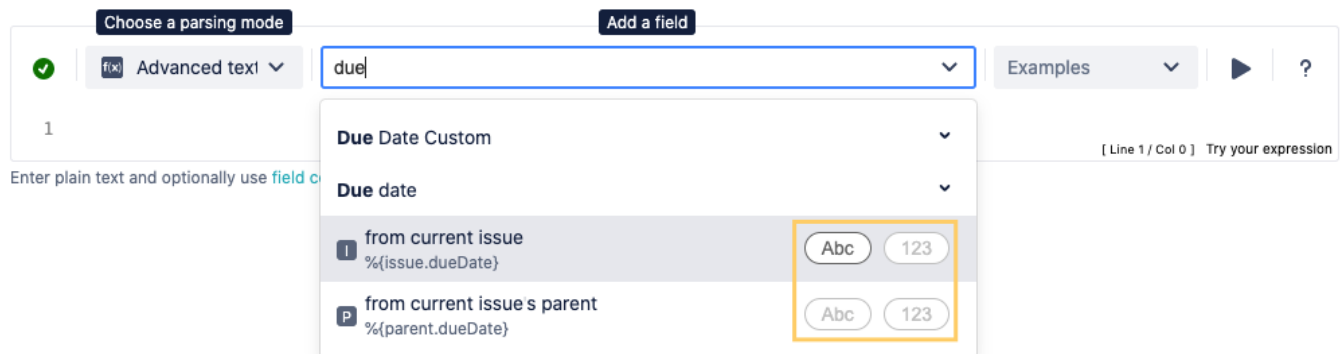


Read more about all [available parsing modes](#).

## Field code injector

The **field code injector** is a **dynamic select list** that lists all available field codes. The fields, or their values, will be replaced with actual values at **runtime**.

The available fields and their notation depend on the selected [Parsing mode](#). Depending on the parsing mode, numeric fields (including dates) can be either inserted as **text** or a **number**.

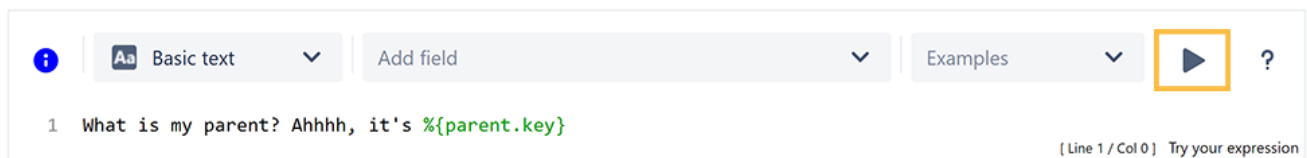


## Example injector



Need inspiration? Each parsing mode comes with **built-in example expressions**. If you choose an example from the dropdown menu, the expression will be automatically added to the **editing area** of the expression editor.

## Run button



By clicking the **Run** button, a test expression panel is displayed below your expression. To test your expression, do the following:

1. Select an **issue** that you want to test your expression with (as the current issue)
2. Click **Run** again

Your browser does not support the HTML5 video element

## Handbook

**Help** is just one click away. If you click on the Help button, an **in-line handbook** will pop up, which provides information about almost any feature of JWT, from field codes, to [Parsing modes](#), and [JWT expression parser functions](#).

Your browser does not support the HTML5 video element

## Expression area

This is where the **magic** happens. Enter a plain text, [Field codes](#), and [JWT expression parser functions](#).

Which options you will actually have, depend on the selected [Parsing mode](#).

Your browser does not support the HTML5 video element

Head over to the [Use case library](#) to see what's possible with the power of the JWT expression editor.

## Auto-complete

### Tech tip: Auto-complete

The expression editor comes with a built-in **auto-complete feature**.

Simply press **<CTRL> + <space>** to get a searchable list of [JWT expression parser functions](#) and available field codes.

Basic text

Add field

Examples

1sub

I

Keys of subtasks

issue.subtasks

P

Keys of subtasks - Parent

parent.subtasks

I

Number of subtasks

issue.subtasks.count

P

Number of subtasks - Parent

parent.subtasks.count

[ Line 1 / Col 3 ] Try your expression

**Highlighting** makes it easy to recognize essential parts of the expression.

If you still have questions, feel free to refer to our [support](#) team.